



RISE AGAINST HUNGER DW PROJECT

Emre Ozden 4547248
Viktoriya Bodnar 4473240

Motivation and Data inspection

- *who are the donors?*
- *the variation of the monetary donations with respect to time, countries and different donation levels?*

Fact	Dimensions	Measures	History
Monetary Donation	Time, Donor, Place, DonationLevel*	TotalAmount, AverageAmount(AVG)	Period from 2010 to 2016

Identified problems:

- missing data
- irrelevant data
- inaccurate values
- non explanatory fields etc.



Proposed improvements:

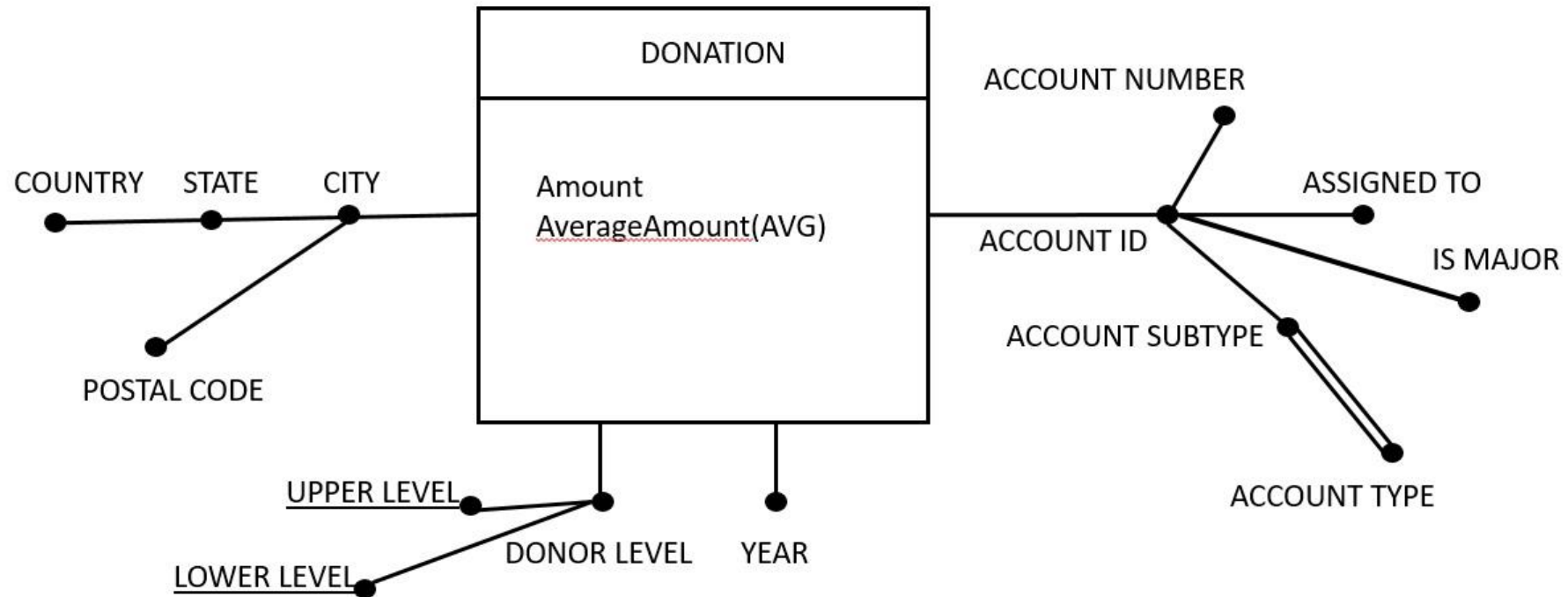
- Merging check
- column transformation
- donation classification

ABC	AccountId	
ABC	AccountNumber	
ABC	AccountSubType	
ABC	AccountType	
ABC	AssignedTo	
ABC	BillingCity	
ABC	BillingCountry	
ZIP	BillingPostalCode	
	BillingState	
	IsMajorDonor	
	Year	
##	Givings	
##	AVG1	
#	DonorClass	



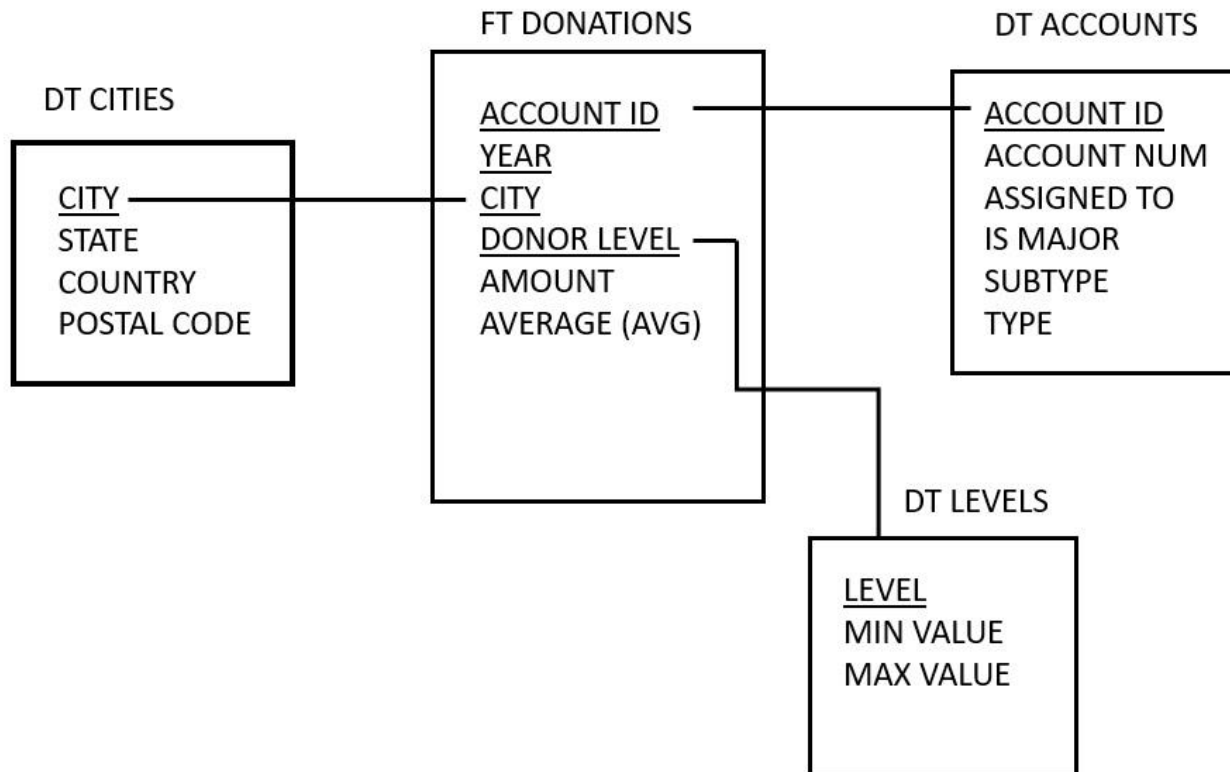
DFM

Attribute hierarchies, multiple arch, descriptive attributes, added measures...

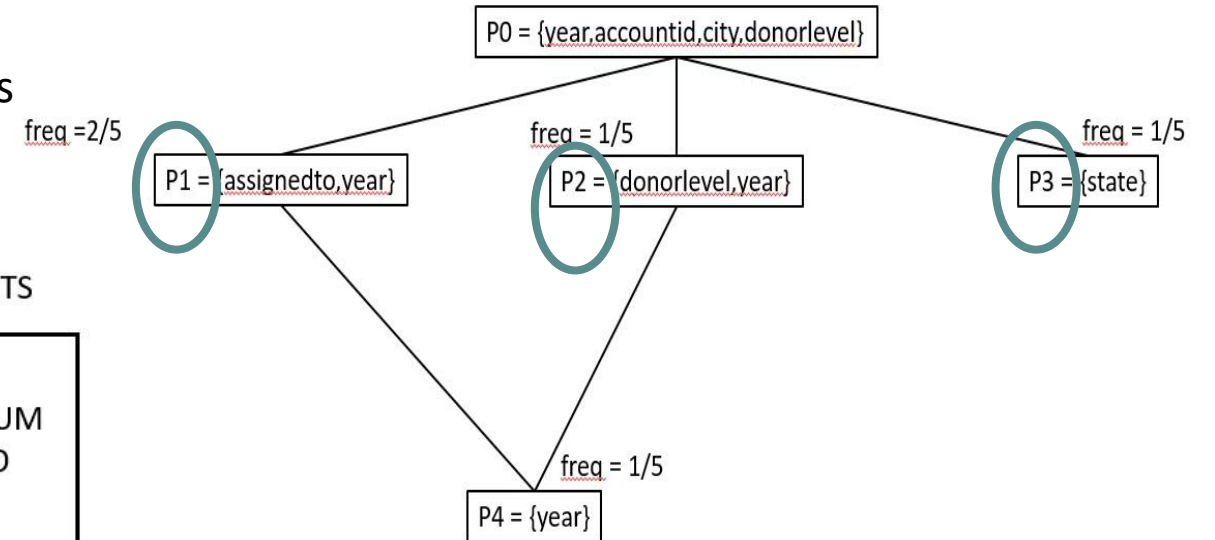


ROLAP

Star schema, ft and dt tables, no secondary dt tables, views



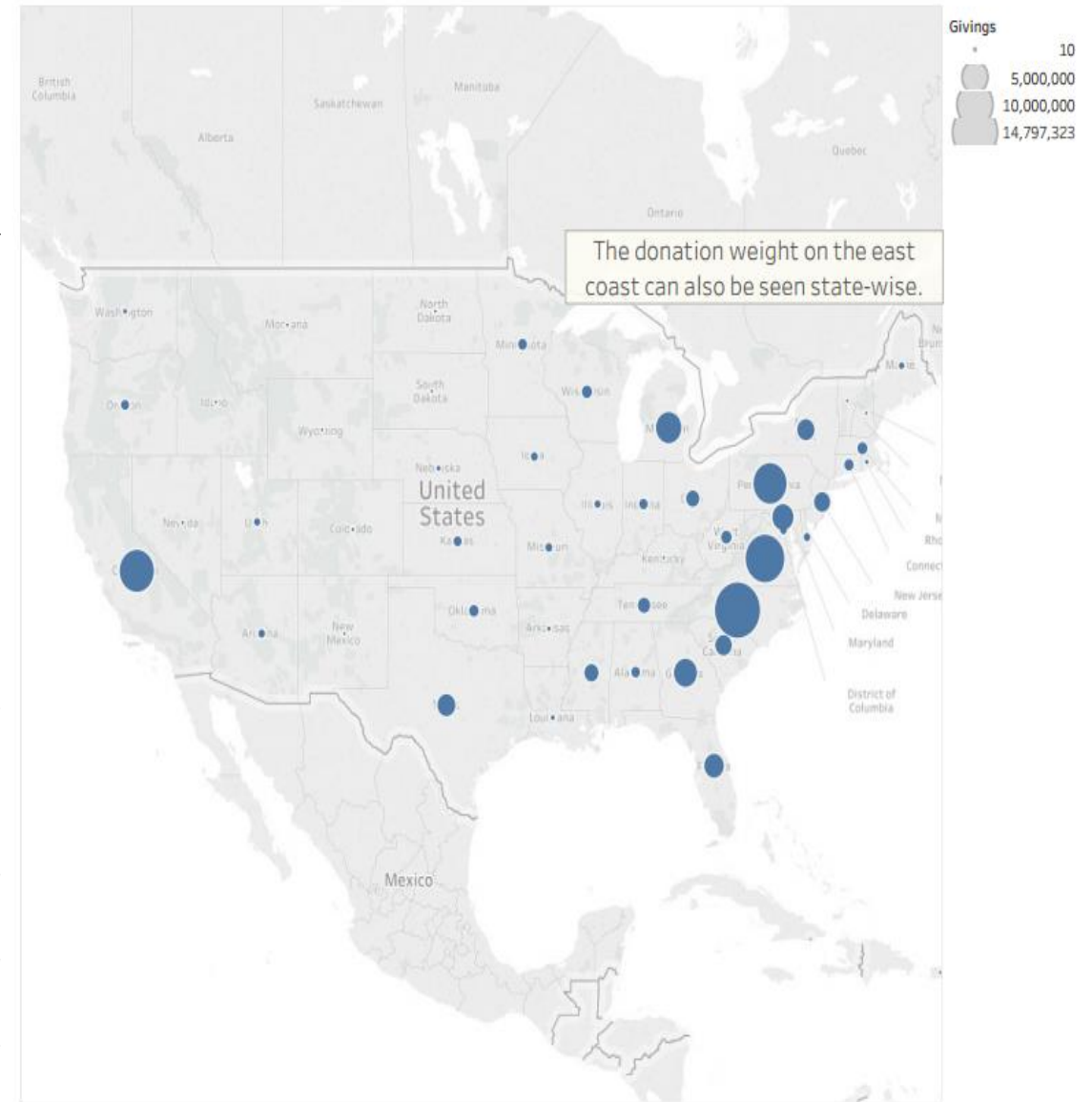
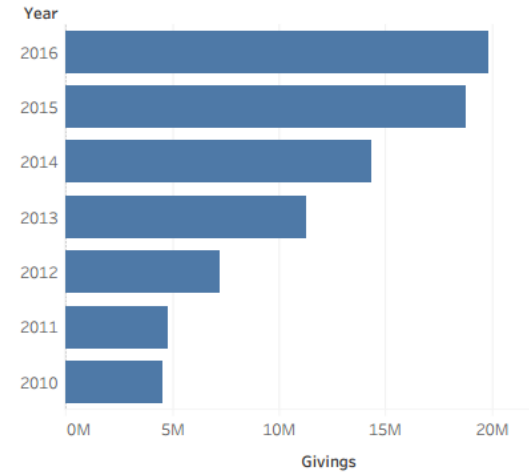
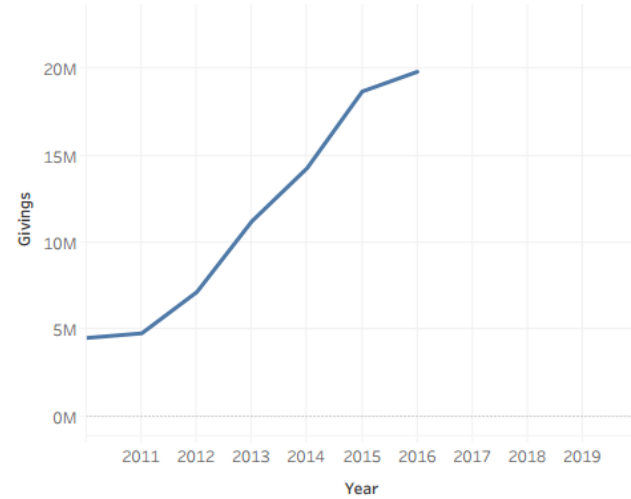
FT = 62 810 AccountId = 47746 City = 4998 State = 169 Country = 47
DonorLevel = 5 Year = 7



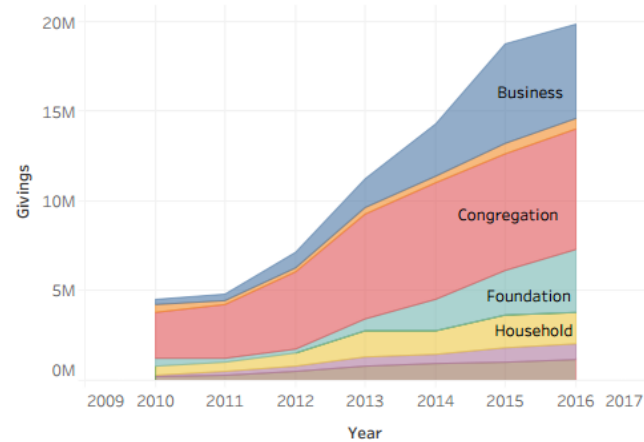
OLAP + HIVE + SPARK

- Partitions → account
- Rank functions → donor + total donation
- Frames → mobile average
- Hive partitions and clusters → year/country+city & accountid
- Spark dataframes and transformations → benefits of DF API

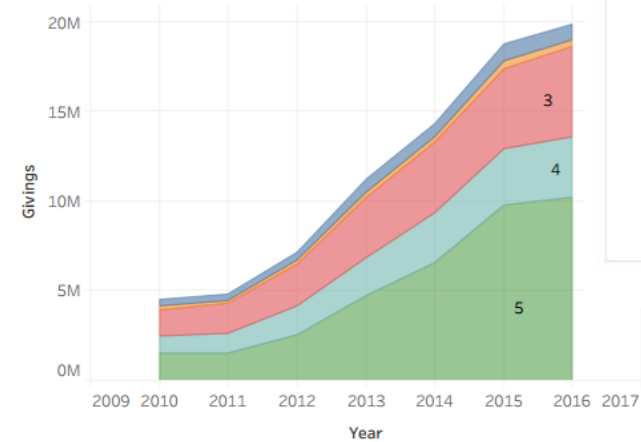
Data visualization



Years - Account Type



Years - Donor Class



A white plate is centered on a red and white checkered tablecloth. To the left of the plate is a silver fork, and to the right is a silver knife. The plate has the text "LET'S FIGHT HUNGER TOGETHER" printed on it. "LET'S" and "TOGETHER" are in black, "FIGHT" is in large black letters, and "HUNGER" is in large red letters.

**LET'S
FIGHT
HUNGER
TOGETHER**

Thanks for your attention